



LSGI RESEARCH SEMINAR

Recurrent Planetesimal Formation in the Carbonaceous Reservoir of the Early Solar System

 **27 SEPTEMBER 2024 (FRI)**

 **4:30 PM - 5:30 PM**

 **QR404, POLYU**

 **ENGLISH**

Dr. Wladimir Neumann

Planetary scientist at Technical University (TU) Berlin



ABSTRACT

Accretion processes in protoplanetary disks produce a diversity of small bodies that contribute to the composition of planets and can survive as asteroids or comets. There is a predominant paradigm that small bodies played a crucial role in potentially multiple scattering events throughout the solar system and in both early and late accretion of terrestrial planets. Despite a high scientific attention paid to these bodies, their early evolution is not well understood, in particular, the timescales of accretion and thermal processes at different heliocentric distances, as well as the nature of planetesimal populations that produced various groups of present planetary objects.

BIOGRAPHY

Dr. Wladimir Neumann is a planetary scientist at the department Planetary Geodesy of the Technical University (TU) Berlin. He obtained his PhD degree at the German Aerospace Center (DLR) Berlin and the University of Münster in 2014. He conducted his postdoctoral research at DLR, University of Münster and Heidelberg University. His research focuses on the physical modelling of planetesimals, asteroids, dwarf planets, and icy moons and on the accretion timescale of planetary objects in the context of space missions, sample analyses, and formation of planetary systems. Within this research, he contributed to the scientific interpretation of the observations made by the space missions Dawn (NASA) and Hayabusa2 (JAXA) as an instrument Co-I and is involved with the ESA missions Hera and Juice. He further leads the international collaboration "Timing and processes of planetesimal formation and evolution" at the International Space Science Institute (ISSI) in Bern and Beijing.

Moderator: Prof. Bo Wu, Associate Head, LSGI

All are welcome! Please register now to join us on-site!

Enquiry: Ms Anna Choi | Tel: (852) 34008158 |
Email: anna.choi@polyu.edu.hk

